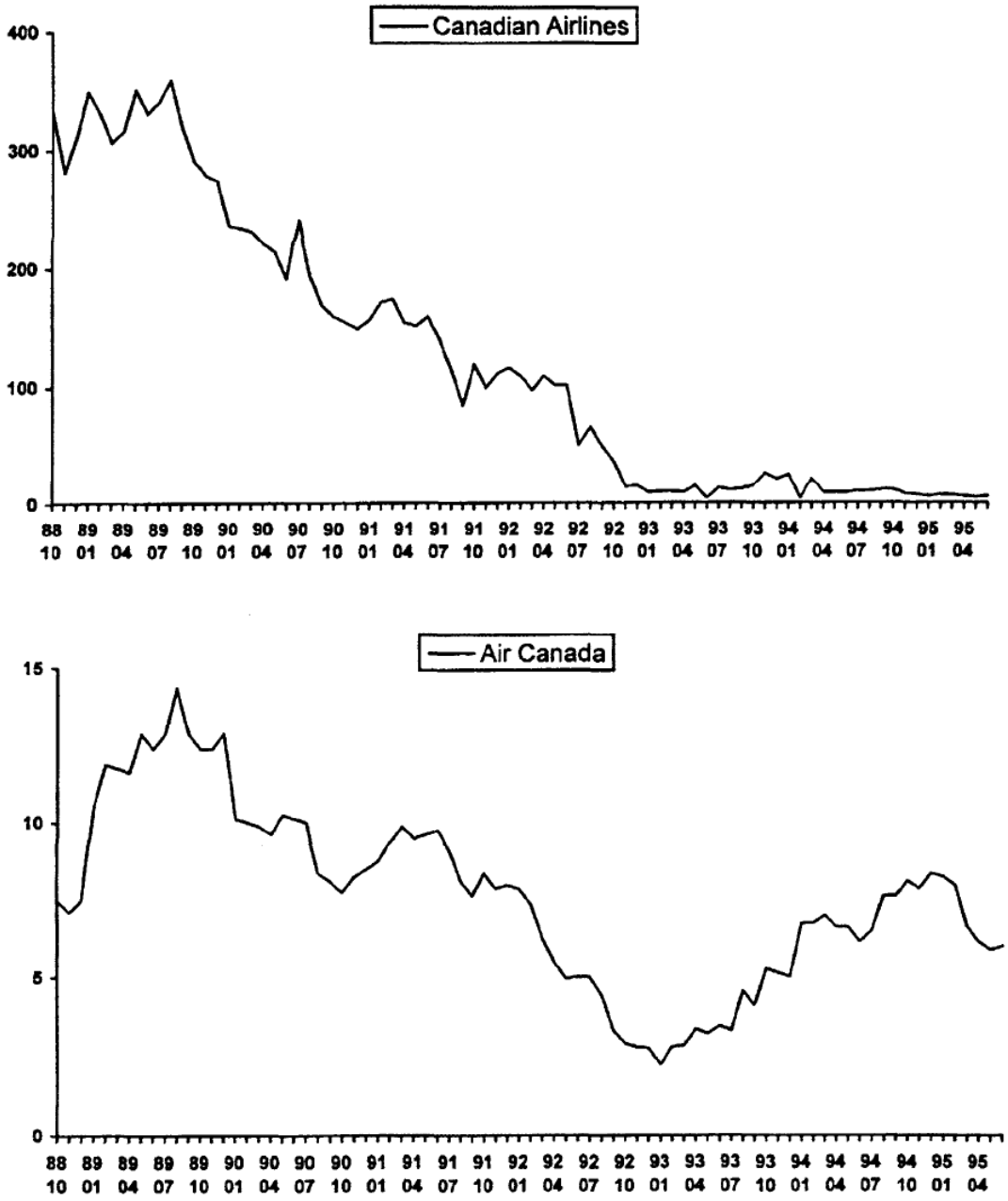
**Exhibit 6**

**HISTORICAL STOCK PRICE TREND**




*SOURCE: Casewriter's Illustration (data taken from Bloomberg)*
*NOTE: Monthly close stock prices used for illustration.*

## Appendix A

## GLOSSARY OF TERMS AND ABBREVIATIONS

**ASM** Available seat miles — the number of seats an airline provides times the number of miles they are flown; a measure of airline capacity.

**Cabotage** The right of an airline to carry local traffic in a foreign market. As a general rule, cabotage is strictly prohibited. For example, Lufthansa is unable to board passengers originating in Atlanta for Dallas on its Frankfurt-Atlanta-Dallas service.

**CRSs** Computerized Reservation Systems began with the American Airlines Sabre System. Originally used to track seat availability, it had expanded to include the booking of other travel services (e.g. car rental, hotels, etc.) and was critical to yield management and airline operations.

**FFPs** Frequent flyer programs rewarded passengers with free trips and other benefits based on kilometres flown. First introduced by American Airlines, this marketing innovation favored large carriers with extensive route systems on which customers could more readily accumulate mileage and select desirable reward destinations. Most larger airlines had initiated their own FFPs.

**Load Factor** Revenue passenger miles divided by available seat miles; a measure of aircraft utilization.

**RPM** Revenue passenger miles — the number of passengers times the number of miles they fly.

**Six Freedoms** Each contracting state in a bilateral air agreement can grant to the other contracting state or states the following Six Freedoms in respect of scheduled international services:

1. The privilege to fly across the territory of another country without landing. For example, Olympic Airways flies from Montreal to Athens over Spain.
2. The privilege to land in another country for technical and other non-traffic purposes. For example, Aeroflot stops for a technical stop (take on fuel and food) in Gander, Newfoundland during its flight from Moscow to Havana.
3. The privilege to put down passengers, mail and cargo in another country. For example, Delta lets passengers off in Lisbon during its New York to Rome flight.
4. The privilege to take on/board passengers, mail and cargo in another country destined for Canada. For example, CA picks up passengers in Zurich and flies them into Calgary.
5. The privilege to take on passengers, mail and cargo in one foreign country for carriage to another foreign country. For example, CA on its Toronto to Frankfurt route can land in Ireland and pick up Irish passengers and carry them to Frankfurt and vice versa.
6. The privilege of carrying traffic between two foreign countries via one's own country. For example, an American passenger can board a CA flight in Los Angeles and go via Vancouver to Ho Chi Minh, Vietnam.

**Unit Costs** Operating costs from scheduled operations divided by scheduled available seat miles.

**Yield** The revenue per passenger mile an airline receives; it represents an aggregate of all the airfares and airline charges and is measured on a per mile basis.

## Appendix B

## INDUSTRY REVENUE AND COST STRUCTURE

Four basic factors affect airline profitability: i) the load factor; ii) the yield or ticket revenue; iii) the unit cost of operating the aircraft, and iv) other on-the-ground costs (i.e., ticketing, terminal operations, etc.). Profits can be enhanced by increasing yields and load factors or by lowering costs. Typically, an airline followed one of these three strategies: i) a greater load factor for a constant revenue yield, ii) higher fares and hence greater revenue yield for a constant load factor, or iii) lower costs while maintaining yield and load factors.

### Profit Dynamic

The operating profits from passenger traffic were determined by a simple relationship:

operating profit = revenue – costs

but revenue and aircraft costs can be re-stated in unit terms (per kilometre):

operating profit = ((revenue / RPK * RPK) – (costs / ASK * ASK))

Revenue / RPK is called yield, or unit revenue (how much the average passenger pays for one kilometre flown). Cost / ASK is called unit costs (the cost of flying an average airline seat (empty or full) one kilometre). So:

operating profit = (yield * RPK) – (UC * ASK)

This can be re-stated as:

operating profit = ((yield * RPK) / ASK) – UC) * ASK

Remember that RPK / ASK = Load Factor (LF), therefore:

operating profit = ((yield * LF) – UC) * ASK

Dividing both sides by ASK results in:

operating profit / ASK = yield * LF – UC

In simple terms, operating profit per available seat kilometre flown is equal to yield times load factor minus unit costs. While the basic formula is simple, the factors affecting revenue yields, load factors and units costs are more complex.

### Revenue Structure

Revenues were the result of the number of passengers flown times the fare, or price paid. About 90 per cent of airline revenue was derived from passengers and 10 per cent from cargo. The price passengers paid for an airline seat differed dramatically. Price varied by class of service, as well as within the same class. Airlines differentiated class of service by segmenting the aircraft cabin. Typically two classes of service were offered both domestically and internationally. AC and CA have economy and business class on all routes. Most American carriers call their products economy and first class.

First and business classes of service provided a separate cabin, larger seats, more personalized service, better food and other amenities. For these enhancements first class fares were more than double full fare economy and business class carried a 15 to 30 per cent premium.

Fares also differed dramatically in the economy cabin. Airlines created certain fences, or restrictions such as staying over a Saturday night, minimum stays, advanced booking and payment, penalties for cancellation and itinerary changes, etc. Passengers prepared to meet some or all of these restrictions could save up to 60 per cent off full fare economy. In 1994, discounted fares accounted for 61 per cent of domestic travel. Most of the fences were designed to prevent business travellers, who desired flexibility and convenience, from taking advantage of discounted fares. These fares (and the accompanying restrictions) accommodated the travel needs of the so-called VFR segment (vacationers, friends and relatives).

Share of passengers on any specific route (city pair) were disproportionate to frequency on that route (i.e., 60 per cent of available departures often translated to 70 per cent market share). This is because passengers tend to travel with the carrier that has the most frequent number of flights.

### Cost Structure

The airline industry was characterized by a high level of fixed costs. The major operating costs for airlines were wages and fuel. The proportion of operating costs varied substantially between the major carriers. Route structures contributed to some of the discrepancy. Shorter routes, and smaller and older aircraft tended to burn more fuel per available seat mile. However, once route structure and the aircraft type were selected, little could be done to affect fuel efficiency.

Fuel was significantly cheaper in western Canada and most expensive in Atlantic Canada (about a 50 per cent premium), with central Canada costs falling mid-way between. As a result, because CA concentrated more of its activity in Alberta and British Columbia, it was able to fuel at an average rate cheaper than AC. However, any substantial regional advantage was mitigated by the need to fuel where you flew and by AC's ability to access that fuel as well. On-the-ground costs like airport gate fees, check-in, travel agent commissions, advertising, administration, etc. accounted for slightly less than half of total costs.

**Yield and Cost Management**

Actually balancing an optimal pricing and cost strategy was complicated. Load factors could be improved by offering seasonal promotions and discounts, but cutting fares eroded revenue yield. Skilful balancing of this trade-off was vital to airline competitive advantage and profitability. Unit cost reductions were dependent upon increasing productivity of labor and equipment without diminishing passenger service and safety. A large proportion, 82 per cent, of airline operating costs were fixed or semi-variable; only 18 per cent were truly variable — travel agency commissions, ticketing fees and meals. Semi-variable costs could be varied only by large and expensive "steps" over the medium- and long-term. The implications were that once an airline determined its route structure (the combination of destinations, frequencies and aircraft) fuel, crew and ground staff costs were largely fixed. Almost the same amount of fuel was used whether a plane flew empty or full; crew size was determined by the type of aircraft, not the passenger load.

The objective of yield management was to optimally balance load factor and yield to maximize operating profit. This task was entrusted to sophisticated computer software that was resident in each airline's CRS. All of the largest airlines had proprietary CRSs to coordinate booking and ticketing activity, yield and cost management, and accounting. Smaller airlines cooperated in joint systems, or licensed another airline's CRS. Sophisticated algorithms forecasted demand and attempted to optimize final load factor and yield.

Typically, Asian carriers had the lowest costs in the industry, followed in increasing order by the U.S., Canadian and European operators. An airline's comparative costs were heavily influenced by its unit and wage costs and by the productivity of its support operations. Exhibit 2 compares key operating statistics among several airlines. Airline executives learned to be cognizant of the sensitivity of these and other important variables. For example, management at CA studied the effects of certain important industry variables and their financial impact on operating income before tax.

| Variable | Financial Impact ($ millions) |
|---|---|
| Increase of $1 per barrel of crude oil | $ - 11 |
| Increase in passenger load factor by 1% | $ + 28 |
| Domestic market growth of 1% | $ + 9 |
| Domestic market share increase of 1% | $ + 20 |
| A 1¢ increase in yield per RPK | $ + 185 |

## Appendix C

## OPEN SKIES AND U.S. CARRIERS

The advent of "open skies" would raise the prospects of increased competition between Canadian and U.S. airlines. In the short run, this competitive rivalry would be moderated by the current alliances in place (Canadian Airlines - American Airlines and Air Canada - Continental Airlines). However, in the long run, Canadian Airlines and Air Canada would feel strong pressure to establish links with one of the global airline consortiums. The following list describes the major U.S. carriers in the airline industry. The ultimate threat to Air Canada and Canadian Airlines will be when these carriers start demanding cabotage rights into Canada.

**American Airlines**
- largest carrier in the world (revenue and capacity)
- primary hubs include Dallas/Fort Worth and Chicago
- strong base of North Atlantic service

**United Airlines**
- largest carrier in the world (RPKs — revenue passenger kilometres)
- primary hubs include Chicago and Denver
- number one U.S. carrier in the Pacific market

**Delta Airlines**
- member of global consortium with Swissair and Singapore Airlines
- primary hubs include Atlanta and Cincinnati
- has conservative management with good operating record

**Northwest**
- member of global consortium with KLM
- primary hubs include Minneapolis/St. Paul and Detroit
- biggest U.S. challenger in the Pacific

**USAir**
- alliance with British Airways
- primary hubs include Pittsburgh and Washington
- focuses on domestic medium-haul traffic

**Southwest**
- considered the industry renegade
- lowest unit costs in the U.S. industry
- concentrates on specific city pairs